

Remarks

The Office Action dated October 6, 2009, has been received and carefully reviewed. The following remarks form a full and complete response thereto. Claims 1-13, 15-39, and 41-53 are pending in the application and are submitted for reconsideration

Interview Summary

Applicants thank Examiner Shahrestani for the telephonic interview with Applicants' representatives on January 6, 2010. During the interview, Applicants noted that the Office Action provided no explanation of how the prior art teaches a multi-fiber optic medical probe with two bores, fibers, or side-firing terminations arranged such that the centers of the bores, fibers, or side-firing terminations are laterally separated from and not in a coaxial arrangement with each other. Although not stated in the Office Action, the Examiner suggested that perhaps the present claims would be obvious in view of the cited art because the difference between the prior art and the claimed invention would require one to merely rearrange the parts present in Ramsbottom, the primary reference.

103(a) rejection

Claims 1-13, 15-39, and 41-53 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2003/0179448 to Ramsbottom ("Ramsbottom") in view of U.S. Patent No. 6,485,413 issued to Boppart ("Boppart"). Applicants respectfully traverse on the grounds that the cited art does not teach or

suggest all elements of the claimed invention and further that it would not have been obvious to combine and/or modify the teachings of the cited art to arrive at the claimed invention.

Independent claim 1 is directed to a multi fiber optic medical probe including at least two optical fibers, side coupling terminations and “at least two bores, the at least two bores being adjacent to, having centers that are laterally separated from and not in a coaxial arrangement with each other.” Independent claims 24 and 28 also recite similar language. Claims 8 and 34 recite that the side-coupling terminations are arranged laterally to, and not in a coaxial arrangement with, each other, as are the optical fibers.

Ramsbottom teaches a remote imaging apparatus that has two bores, but the bores are arranged coaxially (see figs. 6 and 7 of Ramsbottom). Boppart does not cure the deficiencies in the teachings of Ramsbottom, and, in fact, the Office Action does not identify any disclosure of Boppart as supporting the rejection.

“The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.” MPEP § 2142. To make a *prima facie* case of obviousness, an examiner must show that the claimed invention, *as a whole*, would have been obvious at the time of filing. See MPEP §2141.02. “[R]ejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006) see also

KSR v. Teleflex, Inc., 550 U.S. 398, 418 (2007) (quoting Federal Circuit statement with approval) and MPEP § 2142.

The Office Action fails to set forth a *prima facie* case of obviousness.

Ramsbottom does not teach an optical medical probe including at least two optical fibers, side-coupling terminations, and bores configured such that they have centers that are laterally separated and not in a coaxial arrangement with each other. Boppart does not cure these deficiencies.

First, Boppart does not teach a multi-fiber optic probe having at least two bores. It is admitted in the present Office Action that Boppart does not teach a multi-fiber optic probe having fibers inserted separately into different bores. See Office Action Mailed 10/6/2009, p. 3. Because Boppart does not teach a multi-fiber optic probe having at least two bores with fibers inserted separately into the bores, it cannot teach the spatial arrangement of the bores recited in the claims and certainly provides no teaching or suggesting for rearranging Ramsbottom's coaxially-arranged optic fibers.

Second, the Office Action does not explain how or why one of ordinary skill would modify the remote imaging apparatus taught in Ramsbottom according to the teachings of Boppart to arrive at the claimed invention. Specifically, as noted above, the Office Action fails to identify any disclosure in Boppart that would make it obvious to change the concentric arrangement of bores taught by Ramsbottom to the non-coaxial arrangement recited in claims 1, 24, and 28, or to change the concentric arrangement

of optical fibers and side-coupling terminations taught by Ramsbottom to the non-coaxial arrangement recited in claims 8 and 34.

Accordingly, the Office Action fails to meet the Office's initial burden of factually supporting a *prima facie* conclusion of obviousness.

Furthermore, for the following reasons, applicants submit that it would not have been obvious to modify the scope of Ramsbottom to include side-by-side, non-coaxial fibers. The essence of the invention described in Ramsbottom is the use of an annular light pipe for transmitting light to the distal end of the scope to illuminate the object to be viewed and an image relay means (e.g., coaxial fiber) for relaying an image along the main axis from the distal end of the scope. (See Ramsbottom, ¶ 4) "The invention essentially resides in replacing a conventional annular bundle of fibers in such a device with an annular light pipe 1." (Ramsbottom, ¶ 30). Furthermore, Ramsbottom describes numerous purported advantages of an annular light pipe at paragraphs 6-11.

"If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." MPEP § 2143.01 (V) (*citing In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)). Also, "[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." MPEP § 2143.01 (VI) (*citing In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959))

Replacing Ramsbottom's coaxial fiber arrangement with a side-by-side, non-coaxial arrangement would render the Ramsbottom device unsuitable for its intended purpose of exploiting the benefits of an annular light guide, and it would radically change the principle of operation of the Ramsbottom device. Accordingly, it would not have been obvious to replace Ramsbottom's coaxial fiber arrangement with a side-by-side, non-coaxial arrangement.

For the foregoing reasons, the Office Action does not establish a prima facie case of obviousness regarding claims 1, 24, and 28. Accordingly, withdrawal of the rejections of these claims is respectfully requested.

Claims 2-7, 25-27, and 29-33 depend from claims 1, 24, and 28. Since claims 1, 24, and 28 are not obvious over the prior art, their dependent claims cannot be obvious over the prior art. Applicants thus respectfully request that the rejection be withdrawn as to these dependent claims as well.

In view of the above, all objections and rejections have been sufficiently addressed. The Applicants submit that the application is now in condition for allowance and request that claims 1-13, 15-39, and 41-53 be allowed and this application passed to issue.

In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account No. 02-2135.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

Respectfully submitted,

January 19, 2010	/Richard Wydeven/
Date	Attorney for the Applicants Richard Wydeven Reg. No. 39,881 ROTHWELL, FIGG, ERNST & MANBECK 1425 K Street, N.W. Suite 800 Washington, D.C. 20005 (202) 783-6040